These observations are taken at Lagos by the meteorological clerk, under the supervision of the director of surveys; and at the outstations mostly by the medical officers and district commissioners.

These observers in the districts are furnished with two meteorological registers each, which are to be sent alternately to Lagos at the close of each month, so that the records may be compiled there, and the register is also returned in a few days, so that the continuity of the records may not be interrupted.

The rainfall record registered in each station during the previous year stands thus:

Western Province.		Eastern Province.		Central Province.	
Station.	Inches	Station.	Inches.	Station.	Inches.
Lagos	74.76	Bonny	142.26	Forcados	98.23
Ondo	54.59	Egwanga	251.49	Sapele	106.69
Ibadan	46.40	Calabar	156.64	Asaba	44.27
Olokemeji	40.90	Bendi	87.08	Benin City	93.30
Badagri	58.34	Onisha	58.21	Efan *	27.17
Epe	60.23	Obubra Hill *	3.50		
Oshogbo	47.95	Nwerri *	80.14		
Oyo	46.60	Afikpo	90.77		
Saki *	34.32				

* Records incomplete.

The highest rainfall, 251.49 inches, was registered at Egwanga and the lowest, 40.90 inches, at Olokemeji.

THE ROYAL METEOROLOGICAL SOCIETY.

[Reprint of a circular issued by the society.]

The society was founded for the promotion of the science of meteorology in all its branches on April 3, 1850, under the title of The British Meteorological Society. On its incorporation by royal charter, on January 27, 1866, the name was altered to The Meteorological Society; and in 1883, by permission of Her late Majesty Queen Victoria, it became The Royal Meteorological Society.

In 1904 His Royal Highness the Prince of Wales honored the society by becoming its patron.

Meetings are held on the third Wednesday in each month from November to June inclusive—those in the evening being usually (by permission) at the Institution of Civil Engineers, and those in the afternoon in May and June at the society's rooms, 70 Victoria street. These occasions afford an opportunity for social intercourse between those interested in meteorology, tea being served after the evening meetings or before the meetings in the afternoon.

Exhibitions of new and special classes of meteorological instruments, as well as of diagrams, charts, and photographs, are held from time to time. Popular lectures on meteorological subjects by eminent authorities are also arranged for on special occasions.

The papers read at the meetings, together with the discussions, in which every fellow is entitled to take part, are printed in the Quarterly Journal, which also contains notes, correspondence, notices of recent publications, and the titles of such papers as appear to be of general interest bearing on meteorology in the periodicals which are received in the society's library. It thus serves to keep the fellows residing at a distance from London in touch with the meteorological work of the world.

In 1874 the society commenced the organization of a series of second-order stations, at which observations of pressure, temperature, humidity, rainfall, and wind are made on a uniform plan so that the results may be strictly comparable. In addition to these, another class of stations, termed climatological, was organized on January 1, 1880, at which the observations, altho of equal accuracy, are less exacting. These stations, which number about 100, are well distributed thruout the country; they are regularly inspected on behalf of the society, and the results of the observations are published in the Meteorological Record.

In 1874 a conference on the observation of periodical natural phenomena was organized, and as the result of their deliberations the society instituted the series of phenological observations which have been continued since that time, first under the superintendence of the late Rev. T. A. Preston, and since 1888 under that of Mr. E. Mawley.

A lightning rod conference was organized in 1878, which in 1882 published a valuable report embodying a code of rules for the erection of lightning conductors.

The society has initiated and carried out various scientific investigations, of which the following may be mentioned: (1) systematic investigations of the thunderstorms of 1888 and 1889, and the classification of the various forms of lightning; (2) inquiry into the phenomenon of the Helm Wind of Crossfell, Cumberland; (3) investigation into the relation between Beaufort's scale of wind force and the equivalent velocity in miles per hour; (4) the investigation of the meteorological conditions of the upper air by means of kites.

The Symons gold medal, founded in 1901 in memory of the late Mr. G. J. Symons, F. R. S., is awarded biennially by the council for distinguished work done in connection with meteorological science. The medal was presented to Dr. A. Buchan, F. R. S., in 1901; to Dr. J. Hann, of Vienna, in 1903; and to Lieut.-Gen. Sir R. Strachey, F. R. S., in 1905.

The society possesses a valuable meteorological library of about 8700 volumes, 12,000 pamphlets, 200 maps and charts, and 800 manuscripts, unequalled by any collection of works on this science in the world. It also possesses a unique bibliography, which contains the titles of all books, pamphlets, papers, and articles bearing on meteorology, in all languages of which any notice can be found.

In addition to these, there is a large and interesting collection of photographs and lantern slides illustrating meteorological phenomena and instruments.

With the view of advancing the general knowledge of meteorology, promoting an intelligent public interest in the science, and making the work of the society more widely known, a lecturer has been appointed to act in cooperation with scientific societies, institutions, and public schools in various parts of the country. Exhibits of selections from the collection of photographs, drawings, diagrams and charts illustrating meteorological phenomena, and also various patterns of instruments used for observations, are shown, under the charge of a member of the staff, at gatherings of local scientific societies, or on other occasions when they are likely to prove of interest.

Candidates for the fellowship are elected by ballot, after recommendation by three fellows, one of whom must certify from personal knowledge. Ladies are eligible for the fellowship. Fellows are entitled to the designation, F. R. Met. Soc.

Fellows have the privilege of attending the meetings and introducing visitors; they have the free use of the library and receive gratis the Quarterly Journal, the Meteorological Record, and the other publications of the society. The council of the society is elected by the fellows annually, and reports to the fellows at the annual general meeting.

The library and offices at 70 Victoria street, Westminster, are open daily between the hours of 10 a. m. and 5 p. m., excepting on Saturdays, when they are closed at 1 p. m. Fellows are always welcomed at the society's rooms, and the office staff is always ready to assist in supplying any meteorological information which is desired.

Every fellow pays an annual subscription of £2, or a life composition of £25, and in addition an entrance fee of £1. For fellows elected in November and December the payment of the first subscription exempts them from any contribution for the next succeeding year.

In addition to the fellows, there is a class (limited to 20) of honorary members, which is confined to distinguished foreign meteorologists.

All communications should be sent, and all money contribu-

tions paid, to the Assistant Secretary, Mr. W. Marriott, at 70 Victoria street, S. W.; checks being crost "the Bank of England".

Foreigners are eligible to membership in the society, and it is desired to give the society an international character by adding as many as possible to its list of members. The secretary has deposited a number of blanks for nomination with the Editor of the MONTHLY WEATHER REVIEW, and adds: "We always welcome fellows from any part of the world".

THE CHRISTMAS METEOR OF 1873 AT WASHINGTON, D. C.

By Prof. HENRY A. PECK. Dated Syracuse University, Syracuse, N. Y., November 16, 1907.

At the meeting of the Philosophical Society of Washington, D. C., on the 27th of December, 1873, its attention was called by Dr. Peter Parker to a remarkable meteor which had been seen on Christmas eve. The topic excited considerable interest as several members of the society had witnessed the flight of the meteor, and a committee consisting of Dr. Peter Parker, W. L. Nicholson, and Cleveland Abbe was appointed to collect data. The report of this committee was read April 7, 1877, and was published in the Bulletin of the Philosophical Society of Washington for that year. Some time since the Editor kindly called my attention to the report and suggested that further work on some phases of the subject might be useful. In what follows, the reader is supposed to have access to the report in question, which is readily accessible to interested parties.

THE POINT OF DISAPPEARANCE OF THE METEOR.

At twenty-four stations records were made of the disappearance of the meteor. Many of these records are very crude, and when the directions given by the remainder are plotted on a map, it at once becomes apparent that many of the persons making the observations did not see the meteor at the time of extinguishment, as others situated farther along its track continue to report it. This brings us at once face to face with one of the difficulties that confronts any one having to do with observations made by persons unused to such work. The separation of the wheat from the chaff often calls for more skill and judgment than any other feature in the process of locating the tracks of meteors. Undoubtedly the observers generally see the meteor at the points noted, but interposing trees, buildings, and other obstructions cut off the view, and they do not realize the necessity of noting this fact. An example is found in the Washington observations. Four observers report that the meteor disappeared within a degree or two of due west, and only one mentions any obstruction to vision. On the other hand, Prof. E. S. Holden, at the Naval Observatory, made a careful determination and found the disappearance at south 68° west, with an altitude of less than 5°. This determination is verified by the fact that the meteor was reported at Harpers Ferry and Appomattox to have azimuths differing by almost exactly 180°. After a somewhat careful study of the materials, I have made the determination of the end point depend upon the following observations, the longitude of the observer being noted with reference to the dome of the Capitol at Washington:

Station.	Longitude.	Latitude.	Azimuth.	Weight.
Number.	° ′	° ′	°	
14	E. 0 05	39 35	S. 33 W.	1
28	W. 0 02.5	38 54	S. 68 W.	3
40	W. 1 51	37 20	N. 25 E.	1
45	W. 0 43	39 18	S. 22 W.	1

Station 28 was occupied by Prof. E. S. Holden of the Naval Observatory. I have thought that his superior training in astronomical observation should entitle his record to much greater weight than could be accorded to that of observers who were deficient in this training.

It is evident that if the end point had been accurately observed at each station, the vertical planes corresponding to these azimuths would cut each other in a common line passing thru the zenith of the place where the meteor was extinguished. On account of the great errors with which meteor observations are always affected this will scarcely happen, and therefore we are called upon to determine the most plausible position of this line. A method of solution is given by Bauschinger in his "Bahnbestimmung der Himmelskörper" and this method has been followed, with the result that the geographical coordinates of the point are

Longitude 0° 57.8′ west
Latitude + 38° 42′.

The theoretical probable error of the equations producing these coordinates is very small, and the position satisfies very closely the observation made at Danbury, Conn., as it is recorded on page 144. Professor Holden determined the altitude at disappearance to be 4° 45′ or less. Taking into account the curvature of the surface of the earth, we may easily derive from this that the disappearance took place at 4.8 miles from the surface. That the meteor came comparatively close to the surface is also established by other evidence. To the observer at Newcastle, Del., it was lost in the haze of the horizon. At Milford, Del., it disappeared "where the sun set". At Richmond, Va., it was followed to 9° 30′ altitude, and the observer "did not see the end". At Woodstock, Va., about 25 miles away, the altitude was estimated at 20°–25°, the lower altitude corresponding to 9 miles. In what follows a mean, 7 miles, has been chosen and used.

THE POSITION OF THE RADIANT.

When the end of the flight is known, we may find the position of the radiant from the mutual intersections of the great circles past thru the end point and any other point in the flight. Each station will furnish an equation, and the least-square solution of these equations will give the most plausible position of the radiant, or point from which the meteor would seem to approach an observer situated at the end of the flight. The observations that I have used are as follows:

Station.	Latitude.	Longitude.	Altitude.	Azimuth.
Numbe .	° ′	° ′	°	
1	41 20	3 35 E.	30	S. 46° W.
6	39 38	1 20 E.	60	S.
20	39 9	0 2 E.	50	S.
23	38 54	0 1 E.	45	S. 70° E.
26	38 54	0 0	60	S.
30	38 48	0 3 W.	90	
31	38 53	0 13 W.	75	S.
34	38 40	0 26 W.	90	
40	37 20	1 51 W.	40	N. 55° E.
41	38 59	0 53 W.	70	N. 67½° E.
43	38 50	1 31 W.	45	E.
48	38 56	3 9 W.	45	E.

With regard to Station 1, Danbury, Conn., there is some ambiguity in the record. I have interpreted it to mean that the course of the meteor made an angle of 25° with a vertical circle.

The following table may next be constructed:

Station.	α	δ	α^1	δ^1
Number.	° ′	° ′	° ′	° ′
1	327 8	−25 35	353 4	− 6 50
6	318 24	−18 52	29 41	+ 9 38
20	321 43	−20 2	28 23	− 0 51
23	312 44	− 6 31	71 47	+14 45
26	312 57	− 6 37	28 21	+ 8 54
30	308 57	− 0 33	28 18	+38 48
31	316 42	− 6 57	28 8	+23 53
34	306 20	+13 5	27 55	+38 40
40	164 35	+48 2	95 12	+47 39
41	13 22	−37 50	67 17	+43 46
43	95 44	− 2 56	78 55	+26 19
48	105 19	+ 9 38	77 19	+26 23